



Additional chart coverage may be found in CATP2, Catalog of Nautical Charts.

SECTOR 9 — CHART INFORMATION

SECTOR 9

MOUTH AND LOWER REACHES OF THE ST. LAWRENCE RIVER

Plan.—This sector describes the mouth of the St. Lawrence River between Riviere St. Jean and Cap de la Madeleine on the N and S shores, and Pointe des Monts to the W, and then SW along the lower reaches of the St. Lawrence to the Saguenay River. The descriptive sequence is W and then SW along both shores.

General Remarks

9.1 The mouth of the St. Lawrence River, close W of Anticosti Island, is about 70 miles wide and gradually decreases to a width of 24 miles between Pointe des Monts and Cap des Mechins, about 110 miles to the W. Depths throughout the mouth of the river are ample with most of the dangers being found close offshore.

The N coast of the river mouth first extends W for about 78 miles to Seven Islands Bay, and then SSW for 66.5 miles to Pointe des Monts. This coast is rocky and of moderate elevation, being backed by higher hills farther inland. Numerous rivers intersect the coast and constitute good landmarks. The Seven Islands group, which lie off the entrance to Seven Islands Bay, are the most important of several islands which stand off this coast.

The ports of Pointe-Noit, Sept-Iles, Shelter Bay, and Riviere Pentecote are commercially important to shipping.

The S shore of the mouth of the St. Lawrence River between Cap de la Madeleine and Cap Chat, about 60 miles to the W, is generally rocky, cliffy, and backed by hills, some of which are over 609m high.

Winds—Weather.—Easterly winds prevail in the spring and frequently blow for several days in succession. West winds become more frequent toward summer and SW winds prevail in the summer. Light S winds blow occasionally, but N winds are not common during the summer. Steady NW winds are not frequent before September. In October and November, NW winds are frequently violent during heavy squalls accompanied by passing showers of hail and snow. Heavy frost prevails at such times.

Fog is very prevalent in this area during the navigation season and usually accompanies an E wind of any strength or duration and may last for several days. With W or NW winds, fog is generally infrequent and of short duration. Fogs accompanying E or S winds usually clear away rapidly with a shift of wind to the W or NW.

Tides—Currents.—The current N of a line joining Pointe Ouest or Anticosti Island and Pointe des Monts to the W has been observed to have a slight W or SW set. This current joins the outgoing current in the vicinity of Pointe des Monts and sets along the S shore. The width of the current along the S shore ranges from 2 to 14 miles offshore, decreasing in strength toward the outer edge.

Caution.—Although the coast is steep-to and free from off-lying dangers, the shore bank is very narrow and steep-to.

Great caution is necessary at night or in thick weather given little warning of the proximity of danger.

The N shore of the St. Lawrence River between Pointe des Monts and the Saguenay River extends about 118 miles to the SW and is clear of dangers outside the 40m curve, which lies up to 3.5 miles offshore in places. Rugged hills along the shore and close inland rise to heights of almost 304m.

The S shore between Cap Chat and Ile Verte extends about 123 miles to the SW and is clear of dangers outside the 40m curve, which extends up to 7.5 miles offshore in places. Several off-lying islands stand SW of Pointe au Pere. The generally rugged shore rises close inland to heights of up to 457m.

A Vessel Traffic Services Zone has been established in the St. Lawrence River. See paragraph 8.1 for further information.

North Shore—Riviere St. Jean to Seven Islands Bay

9.2 Riviere St. Jean (50°17'N., 64°20'W.) flows into the St. Lawrence River through an entrance about 240m wide, with clay cliffs on the W side and a sandy point on the E side. An extensive shifting sand bar off the entrance seldom has more than 0.9m. Only small boats can enter the river.

The river is spanned by an overhead cable, with a vertical clearance of 7.6m, 1.5 miles upstream from the entrance.

Magpie Bay (50°18'N., 64°26'W.), with general depths of 9.1 to 18.3m, is entered between Riviere St. Jean and Magpie Point, a low rocky projection about 8 miles to the W. With offshore winds, good anchorage can be taken in a depth of 12.8m, but S and W winds raise a heavy sea. A rocky shoal, on which the sea almost breaks at LW, extends close offshore from the W side of Magpie Bay.

Banc Rouge (50°12'N., 64°32'W.), a rocky shoal with a least depth of 7.3m and steep-to, lies 5 miles S of the W entrance point of Magpie Bay.

Caution.—Iron oxide, common along this coast, causes abnormal variation of the magnetic compass. On shore, readings have been obtained ranging from 14° to 29° W. The effect decreases seaward in proportion to depth and distance, and is not effective beyond 5 miles from the shore.

Between Magpie Bay and Moisie Bay, about 60 miles W, the coast consists of rock rising from the sea in steep, sometimes rounded hills, bare or partially wooded. The coast close to the sea rises to 61 to 91m high; 2.5 to 3 miles inland the range of hills is 152 to 213m high. The appearance from seaward is slightly undulating, bold, and unbroken; it is difficult to distinguish individual features when 5 or 6 miles offshore.

There are many rocks, both above and below-water, out to 1 mile from the shore.

9.3 Riviere-au-Tonnerre (50°16'N., 64°47'W.) stands at the mouth of the river of the same name, about 9 miles W of Magpie Point.

The harbor consists of a natural, circular basin, about 183m in diameter. The entrance channel is about 50m wide, with a depth of 1.3m in places in the channel, and bordered by rocks. Drying rocks and shoals obstruct the harbor. South winds raise a sea, making the approach difficult.

Silting has been reported in the harbor, which can be carried offshore during the spring run-off and results in varying depths throughout the year. Depths may be less than charted.

The public wharf on the W side of the harbor is formed in two sections. The N section has a fish plant and is 56m long. Depths alongside both sections vary between 1.4m and 4m. Electrical and water supplies are available.

Sheldrake River (50°16'N., 64°56'W.), which lies about 5.8 miles W of Riviere-au Tonnerre, provides shelter to small craft, but can be entered only in good weather. A village stands on the E bank of the river.

9.4 Riviere a la Chaloupe (50°17'N., 65°07'W.), 8 miles W of Sheldrake River, is available only to boats when there is no surf. Above and below-water rocks lie off the mouth of this river, and rocky islets and shoals lie up to 0.75 mile offshore along the coast up to 2 miles W of the river mouth.

Manitou River (50°18'N., 65°14'W.), about 5 miles W of Riviere a la Chaloupe, can be identified by two clay cliffs, one close E and the other 1 mile W of the river mouth. Both cliffs are visible for a considerable distance seaward.

In good weather, anchorage can be taken in a depth of 27.4m, mud, 1.5 miles SW of the river mouth. Small vessels anchor closer in to the W of the river bar. Depths decrease steadily towards the land, and the bottom is of sand and mud.

Recife de la Pointe a la Boucane, with a depth of 4.6m, except for a rock drying 0.9m, lies about 2 miles SW of the mouth of the Manitou River.

Several rivers and small coves lie along the shore between the Manitou River and St. Charles Point, about 22 miles to the W. All of the fringing dangers lie within the 20m curve, which nowhere lies more than 1.5 miles offshore. A drying reef, steep-to on its seaward side, extends about 1 mile S from St. Charles Point.

9.5 Moisie Bay (50°15'N., 65°56'W.), entered between St. Charles Point and Moisie Point, about 10 miles WSW, has great depths between the entrance points. With the exception of a 7.3m patch about 2 miles WNW of St. Charles Point, all of the fringing dangers lie within 0.5 mile offshore. The Riviere Moise, with shallow depths, discharges close N of Moisie Point. The river is spanned by an overhead cable and a bridge, with a vertical clearance of 4.7m, about 7 miles upstream.

Anchorage can be taken in depths of 14.6 to 16.5m, about 0.8 mile SSE of the entrance to the river.

Moisie Shoal is an extensive, triangular shoal, with depth of less than 5.5m, that extends about 1.8 miles S from the coast W of Moisie Point. It is very steep-to, with depths of 45.7m close to its S extremity.

Rocher Moisie, with depths of less than 1.8m, are two rocks about 0.4 mile apart that lie near the S edge of Moisie Shoal. They can generally be seen in good weather, owing to the change in the color of the water. A heavy sea breaks over them. The N point of **Ile Manowin** (50°06'N., 66°24'W.), in line

bearing 261.5° with the S point of Ile Grosse Boule, about 4.5 miles NE, leads 1 mile S of the edge of this shoal.

The village of Moisie stands on Moisie Point.

A cluster of five towers, fitted with red air obstruction lights, is situated 0.5 mile inland and 3 miles W of Moisie Point.

Baie de la Boule (50°12'N., 66°15'W.), the coastal indentation between Moisie Point and Pointe aux Basques, about 11.5 miles to the W, is fronted by the Seven Islands off its W part. Cayes de l'Est, a steep-to group of drying and above-water rocks, lie about 4 miles E of Pointe aux Basques. With the exception of Cayes de l'Est and the foul ground off the E entrance point to this bay, most of the other dangers lie within 1 mile offshore and at Pointe aux Basques, about 230m offshore.

Sept-Iles

9.6 Sept-Iles (50°08'N., 66°21'W.) consist of a group of six islands fronting the entrance to Baie des Sept-Iles. The peninsula forming the SW side of the bay appears as a seventh island from a distance seaward. The group lies in pairs and are high, rocky, and generally steep-to.

Ile Petite Boule and Ile Grosse Boule, 132m and 210m high, respectively, the E pair of the group, stand about 2.3 miles ESE of Point aux Basques. Ile Grosse Boule is the highest of the Sept-Iles. The passage between Ile Petite Boule and Ile Grosse Boule should not be attempted. Schooners find some shelter from W winds by anchoring off the NE side of Ile Petite Boule, and small craft shelter from S and E winds off the NW side of Ile Grosse Boule.

Ile Petite Basque and Ile Grande Basque, the middle pair of the Sept-Iles, lie about 0.5 mile S of Pointe aux Basques. The passage between the two islands has a least depth of 3m and strong currents. Chenal de l'Est, the deep passage between the two islands and Pointe aux Basques, has the drying Recif du Basque (Basque Reef) in mid-channel.

Ile Manowin and Ile du Corossol, the S pair of the Sept Iles group, lie about 1.5 miles SE of Pointe a la Chasse, the S extremity of the peninsula forming the SW side of Baie des Sept-Iles.

Ilets Dequen (50°07'N., 66°26'W.), consisting of an islet and several above and below-water rocks, lie on a shoal about 0.5 mile in extent 1 mile ESE of Pointe a la Chasse. Chenal de l'Ouest, about 0.8 mile wide and deep, lies in between.

Caution.—The E, or ebb tide, is deflected by Pointe a la Chasse and sets toward Ilets Dequen.

Chenal de Milieu, 1.5 miles wide and deep, lies between Ile Manowin and Ile Petite Basque. The passages between the Iles Boule and Iles Basque, and between the Iles Boule and Cayes de l'Est, are about 1.5 miles wide and deep.

Baie des Sept-Iles

9.7 Baie de Sept-Iles (50°12'N., 66°28'W.) is entered between Pointe aux Basques and Pointe a la Marmite, almost 3 miles WSW. The latter point is the NE extremity of the peninsula forming the S side of the bay. This bay indents the coast about 6 miles to the NW and is bordered on its W and N

sides by extensive sand and mud flats. The port of Sept-Iles stands on the NE shore and Pointe-Noire, the shipping center for Clark City and the Wabush Lake Mines, stands on the S shore.

Pointe aux Basques, under normal weather conditions, has been reported to be a good radar target up to 25 miles.

Tides—Currents.—In the bay, the mean tidal range is about 2.4m.

The tidal currents in the approach channels and within the bay seldom attain 1 knot, but in Chenal de l'Est and Chenal de l'Ouest they attain a rate of 2 knots at springs, or even more in the narrowest part of these channels when influenced by strong winds. Both the flood and ebb are very irregular in direction, being much affected by the position of the Sept Iles.

Aspect.—A conspicuous water tank stands about 1.4 miles NE and a similar tank stands 1 mile N of Pointe aux Basque. A conspicuous tower marked by obstruction lights stands 1.75 miles NE of the same point. Three chimneys stand about 1 mile NE of Basque Point.

Depths—Dangers.—The approach channels leading into Baie des Sept Iles are deep and can accommodate large vessels. Chenal de l'Est is divided into two passages by Recif du Basque. The buoyed N passage is about 0.2 mile wide with a least depth of 23m. The S passage is about 0.2 mile wide with a least depth of 16.9m.

The deepest and best approach to Baie des Sept-Iles is through Chenal du Milieu. This channel is 1.5 miles wide and clear to within 90m of the shore except at Pointe a la Martime, which has a reef extending 0.35 mile from it.

Within the bay there are general depths of 7.3 to 80.5m, with no detached dangers other than the mud and sand flats which lie around the perimeter of the bay.

9.8 Sept-Iles (50°12'N., 66°23'W.) (World Port Index No. 1955), which stands on the SE side of Baie des Sept-Iles, has been developed as a deep-water ore loading terminal to transship the iron ore from Labrador. The railroad transports the ore from the mine to the wharf and extensive facilities have been installed for handling this cargo. The port is a first port of entry and is open the year round.

Depths—Limitations.—Berth information for Sept-Iles is given in the accompanying table:

BERTH LIMITATIONS—SEPT-ILES			
Berth	Length	Depth	Remarks
Minier IOC Wharf			
1	—	5.9m	
2	265m	17.6m	Berthing length extended by dolphins to 488m
4	244m	11.3m	
5	244m	9.8-10.4m	
Quai Pointe aux Basques			
7	183m	7.6m	

BERTH LIMITATIONS—SEPT-ILES			
Berth	Length	Depth	Remarks
Quai des Petroliers			
8	153m	11.9m	The use of this berth is restricted to vessels of 60,000 dwt or less. Vessels alongside are to leave the berth when the wind speed is 32 knots or greater.
Quai Monseigneur Blanche			
14-15	200m	2.0-8.0m	Berthing on NW face only. The SE side of the wharf is lined with boulders and the SW end is in ruins.
Fishing Harbor			
16	285m	4.3-4.6m	
Quai du Parc Urbain			
20	200m	3.2-4.9m	L-shaped

Pilotage.—Pilotage and the use of tugs is compulsory for all foreign vessels. The pilot embarks at the N end of Chenal du Milieu. A Berthing Master and tugs are compulsory for berthing at the ore facilities. Vessels should send their ETA to the terminal 96, 72, 48, and 24 hours in advance; the 96-hour message should include the amount of cargo required. Berthing instructions should be requested 8 hours prior to arrival.

The use of a tug is mandatory for any vessel registered in Canada of 25,000 total dwt or more.

9.9 Pointe Noire (50°10'N., 66°29'W.) (World Port Index No. 1957), lying on the S side of Baie des Sept-Iles about 2 miles W of Pointe a la Marmite, is a wood pulp and iron ore transshipment terminal.

Depths—Limitations.—The Wabash Mines Wharf, a T-head wharf on the N side of the point, is 488m long with a least depth alongside the wharf of 10.8m. A water tower and several tanks are situated behind the wharf.

The ruins of a wharf extend about 0.2 mile E from Pointe Noire. A mud bank, with a least depth of 1.5m, extends 260m N from the outer end of this wharf. The N limit of this bank is defined by lighted range beacons and a lighted buoy. Lighted range beacons lead to the ore wharf. These range beacons are privately maintained.

Two berths of an aluminum plant are situated 0.5 mile E of Pointe Noire. The W berth, which is 260m long, has depths of 12.7 to 14.0m alongside. The SE berth, which is 141m long, has an alongside depth of 9m, and can accommodate a vessel with a maximum draft of 10m. Range lights, privately maintained, mark the approaches to the wharfs.





Sept-Iles—Bulk Pier



Sept-Iles from W

Pilotage.—Pilotage is compulsory for all vessels, and tugs are available to assist in berthing.

Anchorage.—Anchorage can be taken in 16.5m, clay, about 1 mile SW of the pier at Sept-Iles, with Pointe aux Basques in range with the N side of Ile Petite Boule and Pointe au Corbeau in range with the W of the Ilets Dequen. Small vessels can anchor in a depth of 11m, about 0.3 mile farther inshore. The swell in this anchorage, with a strong S wind, is considerable but not enough to endanger a vessel.

Anchorage can also be taken in a depth of 23.8m, soft clay, in the charted anchorage area in the SW part of the bay.

Baie des Sept Iles to Pointe des Monts

9.10 Pointe a la Chasse (50°08'N., 66°27'W.), the prominent SE extremity that forms the S side of Baie des Sept-Iles, has a conspicuous outcrop of rock, 115.2m high, about 0.4 mile inland. The E side of the point is fairly steep-to, but foul ground lies within 0.2 mile S of the point. A television tower, 302m high and marked by obstruction lights, stands about 1.3 miles NW of Pointe a la Chasse.

From Pointe a la Chasse to Pointe des Monts, about 62 miles SW, the coast is of moderate elevation, the land near the shore being composed of small, low, partially wooded hills. The high hills generally stand well inland.

Baie Sainte Marguerite (50°07'N., 66°35'W.) lies between Pointe a la Chasse and Pointe Sainte Marguerite, about 12 miles WSW. Les Jambons, a conspicuous round hill 99m high, stands about 0.8 mile N of Pointe Sainte Marguerite. Foul ground extends about 0.5 mile S from this point.

Riviere Marguerite, which empties into the head of the bay, is fronted by a shifting shallow bar which extends about 0.8 mile offshore. A village stands on the W bank of the river near its mouth.

9.11 Port-Cartier (50°02'N., 66°47'W.) (World Port Index No. 1958), about 2 miles W of Pointe Sainte Marguerite, is an extensive private harbor built by the Quebec Cartier Mining Company for the use of vessels engaged in the iron ore trade. Grain is also shipped from this port. The harbor consists of one basin, 762m long and 137m wide, with wharfage on its N and S sides.

Tides—Currents.—The average tidal rise is about 2.3m.

Depths—Limitations.—Vessel of 100,000 dwt and over must have a draft not exceeding 10.1m forward and 11.6m aft. The maximum vessel length that can be accepted is 304m.

The approach channel was dredged to a depth of 16.6m over a width of 120m. The entrance leading into the harbor basin is reduced to a width of about 90m.

Alongside berths are situated on the N and S walls of the harbor, as follows:

Berth	Length	Depth	Remarks
North Wall			
No. 1	305m	15.2m	Ore loading
No. 4	457m	15.2m	Ore loading
No. 4a	182m	15.2m	Bentonite, limestone, and coke discharging
South Wall			
No. 2	225m	15.2m	Grain and oil discharging
No. 3	225m	15.2m	Grain loading and general cargo
No. 5	64m	15.2m	General cargo for coastal vessels

About 1.3 miles WSW of the entrance to Port-Cartier is an ore-loading wharf. It is 168m long and 20m wide, with a depth 11.8m of alongside. It is connected to the shore by a curving rock-filled causeway.

Aspect.—A conspicuous water tower stands near the W corner of the basin. A radio tower, from which obstruction lights are shown, stands about 0.1 mile N of the E end of the harbor. A conspicuous grain elevator, with 8 grain silos alongside, stands on the S side of the basin. A prominent building, illuminated at night, stands about 2.8 miles W of the harbor. Range lights, each visible only when in alignment lead into the main basin and to the ore loading berth 1.25 miles WSW of the main basin.

Pilotage.—Pilotage is compulsory. Pilots are available at all times and board about 1 mile S of the harbor entrance. Exceptions are made for vessels of less than 106.7m length.

The vessel's ETA should be reported 72, 48, and 24 hours prior to arrival. Changes of more than 1 hour should be reported immediately.

The use of tugs is compulsory for large vessels in excess of 115.8m length.

Anchorage.—Fair weather anchorage can be taken at one of seven designated anchor berths in depths of 20.1 to 29.3m,



Port-Cartier

between 1.5 miles ESE and 2.7 miles SW of the harbor entrance. Holding is good in sand and mud. Small vessels can anchor in the vicinity of Grand Cawee Island. Large vessels anchor in Baie des Sept Iles.

Caution.—An air bubble system has been installed for ice control, and vessels should not use their anchors within the harbor. It is expected that the port will remain open year round.

9.12 Baie de l'Abri (50°01'N., 66°52'W.) lies at the mouth of the Riviere aux Rochers. A wharf at the mouth of the river was formerly used to load pulpwood, but is now in a poor state of repair and is no longer used.

Ile du Quai is joined to Ile Patterson by a bridge with a vertical clearance of 3.2m.

Between Baie de l'Abri and Iles des Caouis, about 12 miles SSW, the coast is bordered by foul ground and islets that extend up to 1 mile offshore.

Iles des Caouis (49°50'N., 67°01'W.), a group of islands and rocks, lie ENE of Sproule Point about 12.5 miles SSW of Riviere aux Rochers. Ile du Grand Caouis, composed of sparsely wooded granite and 46m high, lies about 0.5 mile offshore. Rocher Caouis, 4.5m high, stands 0.35 mile S of the S point of the island. Small vessels can anchor in a depth of 12.8m, mud, off the NW side of the island.

Ile du Petite Caouis, 46m high, stands about 0.3 miles SSW of Ile du Grand Caouis. Several rocks stand near the island and foul ground lies between it and Pointe a Luc to the NW.

Baie des Homards (49°50'N., 67°05'W.), entered between Pointe a Luc (Sproule Point) and Cayes Rouges, about 3 miles to the SW, is fringed by shoal ground which extends about 1 mile offshore. Good anchorage can be taken in a depth of 22m, fine sand over clay, about midway between foul ground off Pointe a Luc and the foul ground extending from Cayes Rouges. Anchorage can also be taken in 9.1m about 1 mile farther NW, fine sand over clay.

Riviere Pentecote (49°46'N., 67°10'W.) discharges close SW of Baie des Homards. A pier, 91m long, extends from a

partially ruined wharf on the E bank close within the entrance. Constant silting takes place and the depth at the wharf was 3.4m and the pier has dried at LW. In 1990, the pier was in a state of disrepair. Local knowledge is required for entering the river.

From Riviere Pente to Pointe des Monts, the shore is generally low and wooded. The hills back from the shore rise 274 to 378m. With the exception of the Ile aux Oeufs group, there are no reported dangers from Riviere Pentecote to Ile Caribou, 17 miles S. For the remaining 12 miles to Pointe de Monts, the shoreline is more broken, with off-lying reefs.

Pointe aux Anglaise (49°40'N., 67°10'W.), about 6.5 miles S of the Riviere Pentecote, is low, wooded, and sandy. A village stands on the point. A rocky shoal extends about 0.4 mile of the point and should be passed at a prudent distance.

9.13 Ile aux Oeufs (49°38'N., 67°11'W.), low, narrow, and sparsely wooded, lies 1 mile offshore about 2 miles S of Pointe aux Anglais. Its S and W sides are bold. Recif aux Cormorans, which dries 4m, lies with its S end about 0.4 mile N of the island. A drying reef extends 0.25 mile S from Recif aux Cormorans, leaving a narrow channel between the reefs and Ile aux Oeufs. Recif Northeast, marked by some drying rocks, extends almost 0.8 mile NE from the N point of Ile aux Oeufs.

Sheltered anchorage can be taken by boats, in a maximum depth of 5.4m in the basin formed between Ile aux Oeufs and the reefs mentioned above.

Between Ile aux Oeufs and Pointe des Monts, about 20 miles SSW, the coast is fringed by foul ground that lies within 1 mile of the shore.

Baie de la Trinite, a coastal indentation, between 5.5 and 7.5 miles NNE of Pointe des Monts, affords excellent anchorage in moderate depths, sand bottom, good holding ground.

A public wharf, 93m long, is situated on the NE side of the bay. Part of the head and the E side of the wharf are filled with rocks. There is a ramp adjacent to the inner end of the wharf. Ruins of an old breakwater lie E of the wharf.

Note.—Pointe de Monts, and the N coast of the St. Lawrence to the W of that point, is described beginning in paragraph 9.18. Depths at the S end of the wharf change continuously and may be less than charted.

South Shore—Cap de la Madeleine to Cap Chat

9.14 Cap de la Madeleine (49°15'N., 65°20'W.) is a rocky promontory with cliffs 18.3m high extending from the hills forming the shore. A rocky reef, partly dry at LW, extends about 0.2 mile E from the cape. A village, with a conspicuous church spire, stands about 1.5 miles W of the cape.

A river flows close along the cliffs on the E side of the cape into the NW side of a bight. A covered hill, about 762m high, rises back of the river and stands out prominently over the front range of hills when seen about 10 to 12 miles offshore. Temporary anchorage can be taken in a depth of 11m, sand and gravel, with the lighthouse on the cape bearing 277°, distant 0.75 mile.

Cap de la Madeleine has been reported to be a good radar target up to 19 miles, and has been reported to be identifiable with charted features by radar up to 9 miles.

From Cap de la Madeleine, the coast extends about 9 miles W to **Pointe du Gros Morne** (Pointe du Gros Male) (49°15'N., 65°33'W.), a prominent headland 91.4m high, and the N point of the S shore of the St. Lawrence River. This section of coast is almost straight and rocky, and bordered by cliffs 121 to 152m high along the W part. Rounded wooded hills rise to heights of 518m about 1 mile inland.

The village of Gros Morne stands in a small bay close SE of Pointe du Gros Morne. A conspicuous church stands in the W part of the village.

From Pointe du Gros Morne, the coast extends about 25 miles W to Riviere a la Martre and the village of Ste. Marthe de Gaspé. The coast is rocky, with cliffs or steep slopes and wooded hills rising to heights of 457m close inland. Four bays, about 5 miles apart, indent this section of coast, but provide no shelter.

Cap aux Corbeaux (49°14'N., 65°45'W.) stands on the W point of Anse de Mont Louis, a small cove with drying reefs extending from both entrance points. Two conspicuous large aluminum colored tanks stand on Pointe Seche.

Marsoui (49°13'N., 66°04'W.), a settlement about 13 miles W of Cap de Mont Louis, has a fishing wharf situated on the E bank of Riviere Marsoui.

Riviere a la Martre (49°12'N., 66°10'W.), a small stream that discharges about 4 miles WSW of Marsoui, has a lighthouse standing on the W bank of the river. A church close SSW, and a high chimney E of the church, assists in locating the lighthouse, which is not always easily made out.

The coast trends WSW for 10.75 miles to Cap Ste. Anne. The cliffs fronting the shore are about 18m high, backed by a comparatively narrow strip of level land, which then rises to wooded summits 305 to 762m high. At LW, drying reefs and boulders extend 90m from shore.

A perpendicular cliff, almost 243.8m high, with a rounded 457m summit close SSE of it, stands about 5 miles WSW of Riviere a la Martre and is conspicuous on E and W bearings.

9.15 Cap Ste. Anne (49°09'N., 66°26'W.), a cliffy projection 16.8m high with a cross, stands about 10.8 miles WSW of Riviere a la Martre. A conspicuous 7.6m high rock, resembling a tower, stands at the foot of the cliff. The village of St. Joachim de Tourelle (Petite Tourelle) stands E of the cape. St. Joachim de Tourelle has a small harbor for the use of fishing boats only, enclosed by two rubble breakwaters. The entrance is 25m wide and has a depth of about 2.5m in mid-channel.

A jetty, 75m long, extends N from the S side of the harbor. Two other berthing walls lie each side of the root of the jetty, each about 40m long. Depths vary from 1.2 to 3.1m. A very conspicuous spired church stands about 1 mile E of Cap Ste. Anne and can be seen for a considerable distance.

From Cap Ste. Anne to Cap Chat, the shoreline forms three successive indentations; the E one, Anse de Ste.-Anne-des-Monts, is the largest.

9.16 Anse de Ste Anne-des-Monts (49°08'N., 66°29'W.) (World Port Index No. 1960) lies between Cap Ste. Anne and Pointe Ste. Anne, about 5 miles WSW. The E part of the bay is fouled by reefs that extend about 0.2 to 0.3 mile offshore. West

of the Riviere Ste. Anne the bay shore is sandy. A church with two spires stands on the E bank of this river.

The river entrance is fouled by a bar of sand and gravel. Toward HW, a draft of 4 to 4.3m can be carried into the river by small vessels with local knowledge. The channel is narrow and the current is swift.

The town of Ste.-Anne-des-Monts extends along the shore of the bay. A pier, 457m long with an L-shaped face 91 long at its outer end, extends from the shore abreast of the town. Berthing dimensions are, as follows:

Berth	Length	Depth
1	124m	4.0m
2	92m	7.0m
3	63m	5.0m
4	110m	3.7m

A basin formed by two breakwaters is situated W of the public wharf. Depths in the basin range from 2.1 to 3m.

Anchorage can be taken in a depth of 16.5m, poor holding ground, with Ste. Anne Church bearing 109°, distant about 0.8 mile. Lumber is usually loaded at the anchorage.

9.17 Pointe du Cap Chat (49°07'N., 66°39'W.), a low, rocky spit, stands about 4 miles WSW of Pointe Ste. Anne. Drying rocks extend about 0.2 to 0.3 mile from the point. The outer edge of these rocks is steep-to and should be given a wide berth.

A conspicuous tower, with an elevation of 235m, marked by red aircraft obstruction lights, lies about 0.8 mile SSE of Cap Chat Light.

Riviere du Cap Chat, about 1.5 miles SW of the above point, provides no anchorage. A breakwater, which may be submerged at HW, extends 200m from shore and is parallel to the channel. The depth in the entrance channel is 0.9m. There is a small public wharf on the W shore with a depth of 0.6m, close S of the road bridge spanning the river which has a vertical clearance of 2.4m.

A fishing harbor, formed by two L-shaped rock breakwaters, extends 0.15 mile NNW from the shore at the town of Cap-Chat, about 0.2 mile W of the river entrance. The basin has a public wharf on the E side, with floating pontoons and a ramp in the SW part of the basin. The entrance, about 38m wide, to the basin is on the SW side and has a dredged depth of 3m. Depths elsewhere in the basin may increase to 3.4m.

A wreck (49°06'N., 66°41.3'W.), which dries 1.5m, is situated to seaward adjoining the NNW extremity of the E breakwater.

Cap Chat, and the S shore of the St. Lawrence River W of the point, is described beginning in paragraph 9.29.

North Shore—Pointe des Monts to Pointe de Betsiamites

9.18 Pointe des Monts (49°20'N., 67°22'W.), the N entrance point to the St. Lawrence River, is a low promontory that rises abruptly close W to an elevation of about 300m. A

rock, with a depth of 3.2m, lies about 0.7 mile ESE of the point. A rocky ledge, with a depth of 2.7m, lies about 0.3 mile off the point.

Pointe des Monts has been reported to be a good radar target up to 20 miles.

From Pointe des Monts to St. Gilles Point, about 31 miles to the W, the coast is steep and bold, and from there to Pointe de Betsiamites the coast is low and sandy. Three large rivers discharge along this section of coast and are fronted by extensive flats.

There is little or no flood current setting to the W off Pointe des Monts, except very close inshore. The constant river current in the middle of the estuary is deflected off Pointe des Monts to the SE toward Cap Chat.

Grand Anse St. Augustine, about 1 mile W of Pointe des Monts, is frequented by small craft sheltering from E winds. There is a depth of 4.1m near the middle of the entrance. Fishing gear may be moored in the approaches to the cove.

The best anchorage is in depths of 18 to 22m, clay, off the middle of the cove with the fog signal building on Pointe des Monts in line bearing 095° with the E point of the cove. The cove shallows rapidly at its head. A line drawn between the islet at the head of the cove and the E point marks the limit of a drying area.

Godbout Village (49°19'N., 67°36'W.) stands along the shore of a sandy bay NE of Godbout River, about 8.5 miles W of Pointe des Monts. A church stands in the village. A government wharf, about 85m long and 20m wide with a least depth of 2.1m, extends from shore. There is also a ferry wharf, 150m long, with an alongside depth of 4.6m on its N side. The government wharf has been reported to be in ruins.

Small vessels can anchor about 0.5 mile E of the river mouth as soon as depths of 27m are sounded. It is advisable to approach slowly with the anchor lowered to that depth because the bottom is very steep. Good protection is provided from W and SW winds. Smaller vessels can anchor off the mouth of a stream in the NE corner of the bay.

9.19 Grand Baie Saint-Nicholas (49°18'N., 67°46'W.) stands in a narrow inlet bordered by high hills, about 6.5 miles W of Godbout Village. There is a narrow dredged channel into the inlet close to the W entrance point, about 22m wide, with a depth of 2.4m. The greatest depth inside the inlet is 16m.

An overhead cable, with a vertical clearance of 34m, spans the bay at the entrance to Grande Baie Saint-Nicholas.

A rocky point with a cross on it projects into the bay.

Small vessels can anchor in an area about 0.4 mile wide, good holding ground, with the rocky point bearing 355° and the E entrance point of the bay bearing 067°. A depth of about 14.6m exists in this position.

Pointe a la Croix, a very bold rocky point, devoid of vegetation, stands about 3 miles SW of Grande Baie Saint-Nicholas.

Anse St. Pancrace (49°17'N., 68°03'W.), about 9 miles W of Pointe a la Croix, is a deep-water shelter for small vessels from E winds. The shores are steep and high. A waterfall on the W side of the cove seen open of the W shore leads into the cove clear of Rocher Comeau. This rocky patch, with a least depth of 3.7m, lies almost 0.8 mile SE of the W entrance point.

Anchorage can be taken in depths of 27 to 37m, fine sand, within the cove. Pontoons are situated in the NE part of the inlet.

Baie des Anglais (49°15'N., 68°06'W.), immediately W of Pointe St. Pancrace, has high, rocky shores and deep water. Baie-Comeau, on the SW shore of the bay, is the site of a paper mill. Baie du Moulin, about 2 mile N of the pier at Baie-Comeau, is the site of an aluminum smelter plant. Close N of the N entrance point of Anse du Moulin is the site of a large grain elevator.

Baie des Anglais is not recommended as an anchorage because of the deep water and the heavy seas which roll in with E winds.

9.20 Baie-Comeau (49°14'N., 68°08'W.) (World Port Index No. 2015) stands in Anse Comeau on the SW side of Baie des Anglais, about 1.5 miles N of St. Gilles Point and is a port of entry. Paper is the principal export. The port is open for shipping all year round.

Tides—Currents.—The mean tidal rise is about 3.2m.

Depths—Limitations.—The approach to the berths at Baie-Comeau are deep and clear, with the 20m curve lying about 90m off the head of the pier.

PORT FACILITIES—BAIE COMEAU			
Berth	Length	Depth	Remarks
Transport Canada Wharf			
1	155m	9.0m	
2	155m	8.7m	
3	135m	7.9-8.6m	
4	220m	8.7-9.0m	Ro-ro ramp
Reynolds Aluminum Wharf			
1	164m	10.1m	Depths may be less than charted
2	189m	10.1m	Depths may be less than charted
3	168m	10.1m	Depths may be less than charted
Cargill Grain Terminal			
1	178m	12.2m	Grain
2	178m	11.6m	Grain
3	212m	8.4m	Grain

Aspect.—The four chimneys of the paper mill are very conspicuous. A microwave tower, 134m high, is situated about 0.2 mile S of the paper mill, with a cross, 80m high, close S of the microwave tower.

An aluminum smelter, 1.75 miles N of the paper mill, lies in the vicinity of Dock No. 2. Between Dock No. 1 and Dock No. 2, there are many oil storage tanks along the shore. A church,

with a conspicuous spire 138m high, lies nearly 0.4 mile from shore, N of the town.

Three sets of range lights, privately maintained and visible only when in alignment, lead to Dock No. 2 and No. 3.

Pilotage.—Pilotage is not compulsory nor is it considered necessary. The approaches to the various berths are clear of dangers and no difficulty should be experienced in going alongside. A qualified docking master is available from the Cargill and Reynolds terminals if requested. Normally, he boards from a tug about 0.5 mile SW of Pointe St. Pancrace. A tug is available year round.

Anchorage.—Anchorage can be taken off any of the terminals in depths of 21.9 to 36.6m, sheltered from all but E winds and seas.

9.21 Riviere Manicouagan (49°11'N., 68°11'W.) enters the St. Lawrence River between Pointe Saint-Gilles and Pointe Lebel, about 3.3 miles to the SW. Pointe Lebel is low, thickly wooded, and fronted by a broad, sandy beach.

Pointe de Manicouagan, about 3.8 miles S of Pointe Lebel, is also low, wooded and fronted by a broad, sandy beach which extends to the village of Pointe-aux-Outardes, about 9.5 miles to the WSW.

Peninsula de Manicouagan lies between Pointe Lebel and Pointe-aux-Outardes. The N side of this peninsula has been reported to be a good radar target up to 28 miles.

The currents are fairly regular and not very strong along the E side of Peninsula de Manicouagan. The maximum rate of both currents is about 2 knots. There is often a heavy sea off the shoal on this side of the peninsula, especially when the wind and current are in opposition.

9.22 Riviere aux Outardes (49°04'N., 68°29'W.) flows into the St. Lawrence River W of Pointe-aux-Outardes and has a controlling depth of 0.6m at LW over the bar at the entrance. Small craft with local knowledge enter the river to load pulpwood at a wharf about 6 miles above the entrance.

Baie aux Outardes lies between Pointe-aux-Outardes and Pointe de Betsiamites, about 10 miles SW. The central part of the bay is deep, but its shores are fringed by flats and shoals which extend up to 1 mile off its W side and up to 3.5 miles off its N side.

Several islets stand near the mouth of the Riviere aux Outardes. The most conspicuous are Ile Blanche, a bare, white granite rock, 23m high, and Ile de la Mine, a red, bare rock, 15m high.

Good anchorage can be taken in Baie aux Outardes in a depth of 25m, mud, with **Pointe a Michel** (48°55'N., 68°37'W.) bearing 192° and Pointe de Manicouagan bearing 065°. Small vessels can anchor closer in to the shore in a depth of 11m. This anchorage is excellent during W gales.

In Baie aux Outardes, the rate of both currents seldom exceeds 2 knots with the flood being much weaker. The direction of the currents in the W part of the bay is reversed by the effect of the river, so that the flood sets N and NE and the ebb SW and SE.

Caution.—The water of the river holds a white earth in suspension. It frequently covers the entire bay, floating on the heavier sea water, and giving the bay the appearance of being

shoal. A vessel passing through this fresh water displaces it, leaving a blue streak in its wake.

Riviere Betsiamites (48°56'N., 68°38'W.) flows into the St. Lawrence River S of Pointe de Betsiamites, about 9 miles SW of the entrance to the Riviere aux Outardes. A shallow, narrow channel, marked by navigational aids, leads through the drying sands which obstruct the entrance. The village of Betsiamites stands on the N side of the entrance.

Pointe de Betsiamites to the Riviere Portneuf

9.23 Pointe de Betsiamites (48°56'N., 68°37'W.), low and sandy, is fringed by a steep-to shoal which extends about 0.8 mile E from it.

The coast between Pointe de Betsiamites and the Riviere Portneuf, about 25 miles SW, extends in that direction for 18 miles to Ile Lavaland, then S for about 7 miles to the Riviere Portneuf. The first 7 miles of this coast is low and sandy with the remainder being rocky, broken, and backed by hills rising to heights of 243m. A conspicuous ridge of white granite, 137m high, stands parallel to the shore about 4 miles inland.

The currents between Pointe de Betsiamites and the Riviere Portneuf set in a general NE and SW direction with the ebb having a velocity of up to 3 knots and the flood up to 2 knots.

Pointe a Michel, low and fringed by shoals which extend up to 0.5 mile offshore, stands about 1.5 miles SSW of Pointe de Betsiamites. A light is shown from Pointe a Michel.

Between Pointe a Michel and Ilets Jeremie, about 6 miles to the W, the low coast is fringed by shoals which extend about 1 mile offshore. Foul ground extends up to 1.5 miles E from the islets. Some conspicuous patches of white sand and clay mark the cliffs close N of these islets.

Fair anchorage, sheltered from NE winds, can be taken in a depth of 18.3m, with Pointe a Michel bearing 064°, distant about 1.3 miles.

Cap Columbier (48°49'N., 68°53'W.), a rocky peninsula about 43m high with a red islet on its W side, stands about 5 miles SW of Ilets Jeremie.

Battures Gulnare, a rocky ridge with a least depth of 3m, lies with its NE end about 2 miles ENE of Cap Columbier and extends about 2.5 miles SW to join the coastal bank. **Pointe Orient** (48°46'N., 68°59'W.) and the NE extremity of Ile Laval, in line bearing about 250°, leads S of this shoal in depths of over 45.7m.

Between Cap Colombier and Ile Laval, about 7.5 miles SW, the coast is indented by foul bights.

Ile Laval (48°45'N., 69°01'W.), 76m high, stands on the E side of the entrance to Baie Laval, which dries at LW.

9.24 Forestville (48°44'N., 69°04'W.) (World Port Index No. 2025), a pulpwood export center, stands near the mouth of the Riviere Sault-aux-Cochons.

Baie Verte, the shipping harbor for Forestville, lies about 0.5 mile ENE of the town. A training wall, which covers at HW, protects the harbor from the S and SW, and a breakwater that extends S from Pointe Rocheuse protects it from the E.

The tidal rise at springs ranges from 4.1 to 5.1m and about 3.4m at neaps.

The paper company wharf is 138m long and 20m wide with depths of 4.5 to 5.0m alongside the E side.

The buoyed approach channel leading to the harbor area is defined by lighted beacons in line bearing 261.5°.

A conspicuous water tower, 30m high and marked by red obstruction lights, is situated about 0.4 mile WNW of the rear range structure.

Pilotage is not compulsory, however, pilots and tugs are available if needed.

Anchorage can be taken about 2 miles off Baie Verte in depths of 11 to 12.8m, sand and mud bottom.

Clay cliffs commence about 1.5 miles S of Baie Laval and continue for 5 miles, where a narrow, sandy peninsula with a clump of pine trees on it, forms the E side of the entrance to Riviere Portneuf. Ile Patte-de-Lievre, a rocky islet 10.7m high, stands 0.1 mile offshore, about 1.8 miles S of Forestville.

Riviere Portneuf to Pointe aux Vaches

9.25 Riviere Portneuf (48°38'N., 69°05'W.), about 7 miles S of Ile Laval, discharges to the E, then turns sharply to the S and runs between a long, narrow sandspit and the shore, and then discharges through numerous shallow channels across Portneuf Sands.

There is a marina on the N side of Riviere Portneuf, 0.3 mile NW of Pointe des Fortin, and a public wharf, on the S shore. The channel leading to the marina is marked by a series of buoys. The positions of the buoys are subject to change to mark the best channel. Local knowledge is essential; flooding, silting, and storms all affect the depths in the channel and at the river mouth. Least depths are in the order of 0.1m, with between 0.5 and 1.1m depths at the marina. A submarine pipeline crosses the river between the public wharf and the marina. A bridge, with a vertical clearance of 2.5m, and an overhead power cable with a vertical clearance of 5.7m, span the river close upstream and downstream, respectively, of the marina.

Ste. Anne-de-Portneuf, a small village with a church in it, stands on the summit of a steep, sandy bank close S of the mouth of Riviere Portneuf.

Pointe au Boisvert (48°34'N., 69°09'W.), about 4.8 miles SSW of the Riviere Portneuf, is low, sandy, and marked by a clump of trees near its extremity. The intervening coast is wooded and comparatively low, with hills rising about 2 miles inland.

Caution.—There is a Canadian armed forces firing and exercise area off Pointe au Boisvert.

Baie de Mille Vaches (48°32'N., 69°13'W.) lies between Pointe au Boisvert and Ilets Boises, 11 miles to the SW, and is fouled by drying sand and sand flats up to 2 miles offshore. A great number of above-water boulders stand on the flats in the W part of the bay.

The village of St.-Paul-du-Nord, marked by a church with a conspicuous spire, stands on a point of red stone within the bay. A wharf in ruins extends from this point.

Riviere Mille Vaches, the largest of several streams, discharges into the head of the bay.

Sault-au-Mouton, a small village, stands at the mouth of the Riviere du Sault-au-Mouton, almost 2 miles SSW of St.-Paul-du-Nord. The river has a waterfall, 24m high, which is conspicuous from a SE direction, but is obscured from other

directions by the entrance points to the river. Three ruined piers stand near the river mouth. A channel leading to these piers can be used at or near HW.

Good anchorage can be taken in depths of 18 to 22m off Sault-au-Mouton.

Ilets Boises (48°25'N., 69°19'W.), two wooded islets, stand on the drying flats about 0.4 mile offshore; a visible wreck lies close NE of the islets. Between these islets and Les Escoumins, about 5 miles SW, the shore is backed by wooded, clay cliffs.

9.26 Baie des Escoumins (48°22'N., 69°23'W.) stands about 5 miles SW of Ilets Boises and dries completely except for a small channel leading from the Riviere des Escoumins. A conspicuous brown stone church with a silver colored spire stands in the village of Les Escoumins near the mouth of the river. A white statue stands in front of the church. A conspicuous aluminum colored water tank, at an elevation of 88m, stands about 1 mile S of the church and is one of the best landmarks for approaching Les Escoumins.

The government pier at Les Escoumins is 122m long with a depth of about 4.3m in the berth 61m long on the N side, and depths of 2.1 to 4.3m in the berth 53m long on the S side. A log flume leads onto the pier.

Use of the government pier is prohibited, except for a section that remains operational, which is used by the ferry. The remainder of the pier is unusable and dangerous (1993).

9.27 Anse aux Basques (48°19'N., 69°25'W.), a small cove about 2 miles SW of Les Escoumins, is the site of the pilot station for vessels bound up and down the St. Lawrence River. The pilot station, a conspicuous red and white building, is fronted by a wharf 61m long with a 17m long L-end that has a least depth of 7m alongside.

The master of every vessel inbound in the Gulf of St. Lawrence and destined for a port W of Les Escoumins, who is unable to communicate with Quebec traffic control on VHF channel 14 (156.7 MHz), must report to Pilots, Montreal via any coast radio station the ETA of his vessel at this pilotage station, together with the net tonnage of the vessel. A minimum notice of 24 hours before ETA at the pilot station must be given and a second notice of ETA 12 hours before hand, with final notice 6 hours before ETA. If a ship is arriving from a point W of the Strait of Canso, the Strait of Belle Isle, or Cabot Strait, the master must give first notice 12 hours before ETA, and final notice 6 hours before ETA. Vessels requiring exchange pilots at Quebec, Trois Rivières, and Montreal are required to give 4 hours notice at these locations.

There is a St. Lawrence River traffic control reporting point off the pilot station for vessels bound up or down the river.

A radar surveillance center is situated at Les Escoumins. Surveillance covers an area with a radius of 32 miles.

Anse aux Basques Light is situated on the N entrance point to the cove. A racon transmits from this light. Range lights, for the use of the pilot vessel, in line bearing 302°, lead into the cove.

9.28 Cap de Bon-Desir (48°16'N., 69°28'W.), a small, rocky, steep-to projection marked by a light, lies about 3.5 miles SW of Anse aux Basques.

Baie des Grandes Bergeronnes, which dries except for a shallow, narrow channel, lies about 4.5 miles SW of Cap de Bon-Desir. The buoyed channel, which leads NNW to the basin N of the wharf, was dredged to 2m in 1997 and is subject to silting. A church with a conspicuous aluminum spire, a sawmill, and a mine stand in the village of Grandes-Bergeronnes at the head of the bay. A government wharf stands close S of the highway bridge which crosses the river in the vicinity of the village. Along the face, there is a stranding berth 23m long with a depth of 4.6m alongside. A wharf, 110m long which dries at LW, extends from Pointe a John, the E entrance point to the bay. A marina, with a series of pontoons, is situated in the basin N of the wharf at Pointe a John.

Caution.—An unexploded ordnance area is situated near Grandes Bergeronnes, which is best seen on the chart of the area. Caution is advised while transiting the area.

Baie des Petites Bergeronnes (48°13'N., 69°35'W.) lies close SW of Baie des Grandes Bergeronnes. A very conspicuous white boulder stands on the E entrance point. Two very conspicuous triangular sand patches stand on the seaward face of the small wooded peninsula which separates the two bays. These patches can be seen for a considerable distance, especially when the morning sun shines on them.

The shore for about 2.3 miles above Baie des Petites Bergeronnes is thickly wooded and comparatively low, but then commences to be high and bold. Two very conspicuous white stone patches stand close together on the cliffs, 2.75 miles SW of the S entrance point to Baie des Petites Bergeronnes. These patches stand on the side of a sharp peak which rises to a height of 129m and is prominent when viewed from the NE.

Baie du Moulin a Baude (48°09'N., 69°40'W.), with a river of the same name emptying into its head, lies about 5 miles SW of Baie des Petites Bergeronnes. A waterfall and the ruins of an old power house stand near the river mouth. The sand formations of the Saguenay district, the high clay cliffs and sand ridges which are very conspicuous from offshore, commence here.

Anchorage can be taken off the bay in a depth of 11m, sand and mud, with Haute fond Prince light bearing 176°, distant about 3 miles. Anchorage can also be taken off Rochers du Saguenay in a depth of 15m, with the same light bearing 193°, distant 2 miles.

Pointe aux Vaches (48°08'N., 69°40'W.), the E entrance point of Riviere Saguenay, is formed of high, gray, steep cliffs lying about 1.3 miles SW of Riviere du Moulin a Baude.

Note.—Riviere Saguenay is described beginning in paragraph 10.2.

The N shore of the St. Lawrence River, W of Riviere Saguenay, is described beginning in paragraph 10.13.

South Shore—Cap Chat to Matane

9.29 Cap Chat (48°05'N., 66°44'W.) is topped by a conspicuous conical hill about 150m high. When viewed from the E or W, the cape appears as an island. Under normal weather conditions the cape can be seen at a distance of 25 miles. A conspicuous tower, with an elevation of 235m, is situated about 0.7 mile SSE of Cap Chat.

Cap Chat has been reported to be a good radar target up to 18 miles and has been reported to be identifiable with charted features by radar up to 13 miles.

The coast between Cap Chat and Matane, about 35 miles to the SW, extends regularly in that direction and is bold, rocky, and high.

From the mouth of the Saguenay River to Cap Chat, there is a constant outgoing current which is found in more than half the width of the St. Lawrence River on its S side. The velocity ranges from 1.5 to 2.5 knots.

A weak current setting SW on the flood is found inside this current and closer inshore than the usual safe track of shipping. During both the flood and the ebb, a strong onshore set has been observed in the vicinity of Matane.

Baie des Capucins, 5 miles WSW of Cap Chat, dries at LW exposing numerous large boulders.

Cap des Mechins (49°01'N., 69°57'W.), about 9 miles WSW of Cap Chat, is 18.3m high. A public jetty protected on the NW side by a rock breakwater, sheltering small craft from all winds except NE to E, extends about 340m NE from Le Gros Mechins.

Fisherman's Wharf, on a breakwater 238m long, extends from the shore 0.3 mile SE of the public jetty. Berths at Les Mechins are as follows: the public jetty, on the SE side of the outer arm, is 119m long and 15m wide. The depth alongside is 6.7m. The Fisherman's Wharf, on the SW side of the outer arm is 72m long, depth alongside 1.8m. A light is shown from the head of Fisherman's Wharf.

The light on Fisherman's wharf is exhibited between April 15 and December 10. A light, which is privately maintained, is exhibited from a pile on the E side of the entrance to the drydock.

The drydock is situated at Le Gros Mechins against the SE side of the inner end of the public jetty. Maximum vessel size is 40.2m long and a width of 12.5m.

9.30 Les Ilets (48°59'N., 67°01'W.), a group of three small islets, lie close offshore about 2 miles WSW of Les Mechins. The E and largest islet is 3.7m high. A rock, with a depth of 1.5m, lies about 0.2 mile seaward of Les Ilets.

A wharf, 91m long with a depth of 3.7m alongside at HW, extends from the coast abreast of Les Ilets.

Ruisseau a Sem, about 2.8 miles SW of Les Ilets, is fronted by a small wharf. A rocky reef, with some large boulders, extends 0.2 mile from the shore beyond the end of the wharf.

A conspicuous, high microwave tower stands about 3.5 miles SSW of Ruisseau a Sem.

Grosses Roches, a village with a church in it, stands about 4 miles SW of Ruisseau a Sem. A wharf in ruins extends from the shore about 1 mile E of the village.

Cap a la Baleine, a prominent headland 76m high, stands about 4 miles SW of Grosses Roches and is bold and steep-to. Ste.-Felicite, a village about 3 miles W of the cape, is fronted by a wharf in ruins. A church stands in the village.

Battures a la Croix (48°55'N., 67°20'W.), a detached 5m shoal, lies about 1 mile N of Ste.-Felicite Church. The sea seldom breaks over this shoal. A rock, with a depth of 7.3m,

lies about 0.5 mile SW and a 9.8m patch lies about 1.5 miles W of Battures a la Croix.

Between Ste.-Felicite and Matane, about 8 miles to the SW, the shore consists of a continuous line of clay cliffs 15 to 18m high; the shoreline is fringed with drying reefs extending up to 0.2 mile offshore.

A conspicuous church stands near the mouth of a small river, about 4.5 miles WSW of Ste.-Felicite. A tower stands 3.75 miles SE and a conspicuous tower stands 2 miles WSW of the mouth of the same river.

Matane to Pointe au Pere

9.31 Matane (48°51'N., 67°32'W.) (World Port Index No. 1990), a lumber and pulpwood exporting center, stands on both banks at the mouth of the Riviere Matane. The harbor has depths of 7.3 to 8.5m and is formed by two breakwaters extending about 0.5 mile from the coast, with the entrance at the NE corner. Due to continual silting, dredging is carried out periodically to maintain the charted depths; mariners are cautioned that depths less than those charted must be expected.

The harbor entrance is open to the NE and strong NE winds, particularly in the autumn, promote heavy seas in the harbor. The wharf within the harbor is 183m long with an extending finger pier near its inner end. The charted depth alongside the wharf is 10m, but is much less alongside the finger pier. Depths shoal rapidly at the head of the harbor. A ferry terminal, with two berths and depths of about 4.8m, lies inside the E breakwater. A fisherman's wharf, 161m long and with a depth of 3m, is situated in the S part of the harbor. Fresh water is available by pipeline and light fuel and diesel oil by tank trucks. Pilotage is not compulsory.

A detached 5.2m shoal lies about 0.4 mile E of the N breakwater of the new harbor.

Submarine pipelines, 0.3 mile NE and 0.3 mile SW of the harbor, extend 555m and 300m, respectively, to seaward. The SW pipeline has a depth of 1m at its outer end.

The shore up to 4 miles SW of Matane consists of a low sandy beach, but from there to Pointe au Pere, about 38.5 miles WSW, the shore is fringed by reefs strewn with boulders which extend up to 0.2 mile offshore at LW. Between Matane and Pointe Mitis, about 22 miles SW, there is a prominent hill, about 2 miles inland, rising from level ground to an elevation of 183m. Farther to the W, some isolated hills stand about 2 miles inland, but are much lower. Mont Camille, a prominent hill 573m high, stands about 10 miles SE of Pointe au Pere.

The village of St.-Ulric stands at the mouth of the Riviere Blanche, about 7 miles SW of Matane. A church stands in the village. A conspicuous microwave tower, marked by obstruction lights, stands about 1.8 miles S of the village. At night, a building next to the tower is floodlit.

9.32 Baie des Sables (48°43'N., 67°54'W.), a small village about 9 miles SW of St.-Ulric, has a stone church with a conspicuous high spire built close to the shore.

Metis-sur-Mer (48°41'N., 67°59'W.), a summer resort with several large hotels and numerous cottages, stands about 4 miles SW of Baie-des-Sables. Les Boules, a conspicuous, bare, round islet 14m high, stands about 0.2 mile off the resort. A

conspicuous power generating station is situated about 1 mile E of Les Boules.

Pointe Mitis, the W point of Anse du Petit Mitis, stands almost 2 miles W of Les Boules and is low and wooded. Several buildings stand on the point. Anse du Petit Mitis is small and divided into two drying rocky coves.

Anchorage can be taken by small vessels about midway between the E reef off Pointe Mitis and Les Boules in a depth of 5.5m, mud. Large vessels can anchor in a depth of 9 to 11m farther offshore.

Pointe aux Cenelles, a cliff about 18m high, stands 5 miles SW of Pointe Mitis and forms the W point of Baie Mitis. There is a wharf at Pointe aux Cenelles, its use is restricted to designated vessels.

In good weather, anchorage can be taken in depths of 11 to 21.9m off Baie Mitis, in good holding ground.

Ste.-Flavie, a village with a church in it, stands 3.5 miles SW of Pointe aux Cenelles. There is a pier at the village. The pier is rock-filled on the E side and partially rock-filled on the W side. It is reported to be in a poor condition. A church with a spire stands 2 miles inland and a similar church stands about 1 miles farther inland. The three church spires are in line bearing about 133°.

Pointe aux Coques (48°33'N., 68°23'W.), marked by a church, stands about 11 miles SW of Pointe aux Cenelles. A drying pier extends from the point.

Caution.—A submerged water intake pipeline extends 1 mile N from the shore of Pointe aux Cenelles. Another intake pipeline lies close E.

Pointe au Pere to Ile Verte

9.33 Pointe au Pere (48°31'N., 68°28'W.), about 4 miles SW of Pointe aux Coques, is the former site of the pilot station for the St. Lawrence River. A conspicuous church, with a village grouped around it, stands about 0.4 mile inland. A large pier extending from the shore abreast Pointe au Pere was reported to be in a state of disrepair and all berthing was prohibited.

Ice.—The river never freezes over off Pointe au Pere. Drifting field ice usually arrives about December 1 and disappears early in April. There is rarely any heavy ice until the end of December, and a channel of water always remains open, either on the N or S side of the river according to the prevailing wind. Even light airs are sufficient to drive the ice to mid-channel.

9.34 Rimouski (48°28'N., 68°32'W.) (World Port Index No. 2030), a fairly large town fronted by a harbor area, lies about 3 miles SW of Pointe au Pere and is a port of entry. Lumber and pulpwood are the principal exports.

A church with a conspicuous spire stands in the town of Rimouski. A similar church stands near the root of West Pier.



Rimouski

The berthing facilities consist of East and West Piers joined at their inner ends to form a basin. Berthing information is described in the accompanying table:

PORT FACILITIES—RIMOUSKI			
Berth	Length	Depth	Remarks
1	213m	7.3m	East side of West Pier
2	184m	7.3m	Head of basin
3	130m	7.3m	West side of East Pier
4	150m	7.3m	West side of East Pier
5	150m	7.3m	West side of East Pier
6	113m	7.3m	East side of East Pier
7	255m	4.3m	East side of East Pier

The dredged depth in the approach channel is 5.4m, but siltation occurs and depths may be less in the channel and in the area off the berths.

A marina operates from the basin and pontoons on the W side are used by fishing vessels.

The tidal rise at Rimouski is 4.5m at springs and 3.05m at neaps.

Lighted beacons, in line bearing 178.5°, lead through the approach channel to the harbor basin. The lights are visible only when in alignment.

Pilots can be obtained from Les Escoumins.

Anchorage can be taken in Rimouski Roads N of the piers. The best anchorage lies in a depth of 8m, with Rimouski Light, situated on the outer end of the East Pier, bearing 177°, distant 1 mile. To obtain better shelter from W winds, small vessels can anchor in depths of less than 5m, with Rimouski light bearing 129°, distant 0.75 mile.

Caution.—The airport is situated about 0.5 mile SE of the inner end of the East Pier. Several red and white lights are shown at the airport during flight operations; these lights are visible from the river and should not be confused with navigation lights in the vicinity.

9.35 Ile St.-Barnabe (48°28'N., 68°34'W.), joined to the mainland by drying flats marked by numerous boulders, lies about 1.8 miles off the town of Rimouski. The island is wooded except near its E end. When seen from the NNE through ENE at a distance of about 4 or 5 miles, the island appears to be two islets.

Ilet Canuel, a narrow islet about 38m high, stands between the SW end of Ile St.-Barnabe and the mainland. The slopes of the island are wooded, but the summit is bare.

Two radio towers, one of which is conspicuous and 182m high, are situated on the mainland S of Ilet Canuel. A microwave tower, with an elevation of 242m, is situated almost 4 miles ESE of the NE end of Ile Canuel. Other microwave towers are situated about 2.5 miles SE of the same point.

Anchorage can be taken by small vessels, sheltered from E winds, in Rade St.-Barnabe, off the W end of Ile St.-Barnabe,

in a depth of 4.6m, with the above radio tower bearing 090°, distant 1.5 miles.

Sacre-Coeur (48°25'N., 68°35'W.), a small village with a church in it, stands about 3 miles SW of Rimouski.

Cap du Caribou stands 3 miles SW of Sacre-Coeur. The shore between these points is fronted by drying ridges and is backed part of the way by wooded cliffs marked by several conspicuous bare patches.

Old Bic Harbor (48°22'N., 68°44'W.) dries at LW, with the exception of a small bight between the entrance points. Iles Bicoques, two round, wooded islets of about the same height, stand close off Cap du Corbeau, the E entrance point to the harbor. A small pier extends from the shore abreast of the village of Bic in the SE part of the harbor.

Small vessels can anchor in depths of 3.7 to 4.3m, mud, midway between the harbor entrance points.

The land SW of Bic commences to take the peculiar formation of the Bic Ranges. The hills, rising gradually from the E and W to Mont du Bic (Bic Hill), are composed of sandstone and quartz, which runs in narrow ridges parallel to the coast and to each other, with deep valleys in between. When seen from up or down the river, these ridges present a very remarkable appearance. **Mont du Bic** (48°20'N., 68°49'W.) rises to a height of 344m. A conspicuous television mast stands close NW of this hill. A conspicuous line of granite cliffs, shaped like a broad V, stand on the seaward side of Mont du Bic.

9.36 Cap a l'Original (48°22'N., 68°48'W.) is the N extremity of a small peninsula extending from the coast. The hill near the cape is 72.5m perpendicular cliff about 67m high.

Anse a l'Original, the bay to the E of Cap a l'Original, provides good anchorage to small vessels in a depth of 5.5m, mud, with the N face of Cap a l'Original bearing 255°, distant 1 mile.

Ile du Bic (48°24'N., 68°52'W.), long, narrow, and thickly wooded, lies 2.25 miles NW of Cap a l'Original. The island is thickly wooded and rises to an elevation of 55m to the tops of the trees. Bic Channel lies between the island and the mainland. St. Fabian Beacon, orange colored, stands on the S shore of the St. Lawrence River, about 2.8 miles WSW of Mont du Bic. This beacon, in line with La Muraille (The Notch), a conspicuous hill 274m high with a notched summit, leads over Alcide Rock.

Ile Bicquette (48°25'N., 68°53'W.), about 15m high, stands close NW of Ile du Bic and is separated by Bicquette Channel. The positions of the dangers which lie within 1.5 miles SW and 1 mile E of the N end of this island can best be seen on the chart.

Alcide Rock, with a least depth of 1.2m, lies on a small detached shoal about 3.5 miles SSW of Ile du Bic.

Good anchorage, sheltered from W winds, can be taken in depths of 12.8 to 14.6m, mud, with the N point of Ile du Bic bearing 263°, distant 1 mile.

When strong N winds blow during the autumn, the best anchorage lies about 0.5 mile off the SE shore of Ile du Bic, about midway along its length.

With E winds, the most comfortable anchorage lies a little more than 0.5 mile S of Ile du Bic Light in a depth of 12.8m,

sand and mud. There is less wind and considerably less sea here than elsewhere.

A conspicuous microwave tower, 216m high, stands on the coast about 0.5 mile SE of The Notch.

9.37 The coast for about 2.5 miles W of La Muraille consists of almost perpendicular cliffs, 152 to 182m high, terminating at Pointe a la Cive (Pointe a Cives).

A rocky patch, with a depth of 9.1m, lies almost 3 miles WNW of Pointe a la Cive. Another shoal, with a depth of 5.8m, lies about 1 mile N of this patch.

St.-Simon-de-Rimouski, a village grouped around a church with a spire, stands about 6 miles SW of Pointe a la Cive and 1 mile inland. A conspicuous white cross is situated near the shore about 1.5 miles NW of the church.

Ile Rasade Nord-Est (48°12'N., 69°08'W.), small and low, stands about 9 miles SW of Pointe a la Cive and 1.5 miles offshore. Ile Rasade Sud-Oest lies 1.5 miles SW of the above island and is also small and low. These islets are each rocky with grass, but no trees. A conspicuous stone cross stands near the SW end of Ile Rasade Sud Ouest.

The coast between Ile Rasade Nord-Est and Ile Verte, about 13 miles SW, is generally low with shallow coastal indentations. The land rises in long ridges to the back ranges which have elevations of up to 300m, with no conspicuous summits. The shore is bordered by extensive flats, most of which dry, exposing large boulders.

9.38 Trois Pistoles (48°07'N., 69°10'W.), a town on the S shore about 13 miles SW of Pointe a la Cive, is marked by a grayish colored church with three spires, one taller than the others. This church can be seen for a considerable distance, especially when the sun shines on it. A pier, with a NW and NE arm at its head, extends from the shore abreast the town. The outer end of the pier dries at LW. Lighted beacons, in line bearing 137°, lead into the pier.

Good anchorage for small vessels can be taken in a depth of 5m, sand and mud, with Ile aux Basques Light bearing 243°, distant 1 mile.

Riviere-Trois-Pistoles, a village with a church with a spire in it, stands 2.5 miles SW of Trois-Pistoles. A microwave tower stands about 0.8 mile N of the village. A small wharf, with shallow depths, extends from the shore abreast of the village.

Ile aux Basques (48°08'N., 69°15'W.), thickly wooded and 40m high to the tops of the trees, stands 3 miles W of Trois-Pistoles. A sandy spit extends 0.4 mile SE from the SW end of the island.

Ile aux Pommes, grass covered and 13m high, stands 2.75 miles SW of Ile aux Basques. It is composed of sandstone and covered with grass, but has no trees on it.

Small craft can anchor in about 5m, about 0.4 mile off the NE end of Ile aux Pommes.

Between Trois-Pistoles and Ile Verte, about 9 miles SW, drying flats marked by numerous large boulders extend a considerable distance offshore.

9.39 L'Isle-Verte (48°01'N., 69°20'W.), a small village, stands on the mainland abreast Ile Verte, which is described in paragraph 10.16. A gray church with a red roof and a gray spire, stands on the low land below the village. A pier extends about 457m from the shore abreast of the village and has a depth of 3.4m alongside its outer end at HW.

Ile Ronde, 23m high, lies on the flats about 1.5 miles WNW of the outer end of the pier at L'Isle-Verte.

The shore NE of L'Isle-Verte is low and swampy. Earth cliffs, 15 to 30m high, back the shore for about 4.5 miles. The shore to the SW is also low, but it is backed by a narrow coastal ridge of wooded hills about 80m high.

There is good anchorage in Rade de L'Isle Verte N of the island of Ile Verte. A good berth lies in a depth of 10m, with Ile Verte (East End) Light bearing 148°, distant about 1 mile. The bottom is stiff mud. Smaller vessels anchor closer in.

Note.—The S shore of the St. Lawrence River, W of L'Isle-Verte, is described beginning in paragraph 10.16.